ABSTRACT

The present invention is directed to methods for the identification and isolation of antigen-specific T cells using a novel class of artificial antigen presenting cells. The resulting T cells may be used to produce expanded T cell populations as well as for modulating T cell responses. In general, the artificial antigen presenting cells useful in such methods are liposomes that contain MHC:peptide complexes presented on the outer surface of the liposome. Such artificial antigen presenting cells may also include accessory molecules, co-stimulatory molecules, adhesion molecules, and other molecules irrelevant to T cell binding or modulation that are used in the binding of artificial antigen presenting cells to solid support systems that may be used in the retrieval and identification of antigen-specific T cells.